1966

The Naval Postgraduate School Story

Monterey, California: Naval Postgraduate School

http://hdl.handle.net/10945/66439

THE NAVAL POSTGRADUATE SCHOOL STORY

The year 1966 marked the fifteenth anniversary of the establishment of the U. S. Naval Postgraduate School in Monterey, after 42 previous years on the grounds of the Naval Academy at Annapolis.

In the School's first 15 years here its student population rose from 500 to a high of about 1500, responding to increasing demands from the Fleet and Shore Establishment for officers whose educational background equips them to keep pace with rapidly advancing naval technology. This year, because of the demands of operations in Southeast Asia, the enrollment has dropped to 1200.

Fully recognized and accredited by collegiate accrediting organizations, the Postgraduate School confers bachelor's, master's, and doctor's degrees in a variety of scientific, technical, management, and engineering fields. It is the one naval institution of its kind in the world.

Academically, the School is divided into 10 departments. They are: meteorology and oceanography, electrical engineering, mathematics, material science and chemistry, physics, and operations analysis. Also, government and humanities, aeronautics, mechanical engineering, and business administration and economics.

A baccalaureate program, conferring degrees in both arts and sciences, is conducted for selected U. S. naval officers who have not previously earned a

college degree. Most of the officers in the baccalaureate program are naval aviators who entered upon flight training with the minimum requirement of two years of college.

Integrated into the operation of the Postgraduate School is the Navy Management Systems Center. Functioning since 1965, it teaches the analytic approach to decision-making in the executive branch of the government. Its eight regular four-week course sessions a year are intended for governmental managers at the middle and upper-middle levels -- commanders, GS-14's and up.

* * *

"Officers selected for courses at the Naval Postgraduate School may anticipate a 'tough' assignment," the Chief of Naval Personnel advises, and this forewarning is echoed by the School's officer-students. Many find that the rigorous demands of their courses require not only the midnight oil, but oil on many a Saturday, Sunday, and holiday as well.

Nine out of ten of the School's students are naval officers. Thirty percent previously attended the Naval Academy, and seventy percent attended civilian institutions. Also enrolled are officers of the Marine Corps, Coast Guard, Army, Air Force, and 74 foreign officers representing 20 navies. All wear civilian clothes at the School.

In the School as a whole there is normally about an even split between naval aviators and shipboard line officers. Most are serving in the grade of lieutenant, although there have been students in every grade from lieutenant (jg) to captain. (There is, in fact, a special five-day management course which accepts only admirals, generals, and civilians of comparable governmental grade.)

Over the years a sizeable number of officers who have completed PG education have advanced to high levels. Six active four-star admirals have completed postgraduate work. So have 14 vice admirals, including Vice Adm. Rickover, and 85 rear admirals.

Two former heads of the Navy and Marine corps were graduates of the Naval Postgraduate School. They are Adm. Arleigh A. Burke who was chief of naval operations from 1955 to 1961, and Gen. Clifton B. Cates who was commandant of the Marine Corps from 1948 to 1952.

Five of nineteen officers selected for the astronaut program in 1966 were Naval Postgraduate School graduates. They brought to seven the total number of Naval PG School graduates selected as astronauts. One of the earlier selectees is Comdr. Eugene Cernan who "walked" in space on May 31, 1966. The other is Comdr. Richard Gordon, who was orbited in Gemini 11 on Sept. 12, 1966.

What does the typical graduate of the Postgraduate School think of his education here? More importantly, has it helped him to accomplish his subsequent

assignments more effectively? To answer these questions the Postgraduate School confidentially queries graduates when a certain period of time has elapsed after their graduation.

Typical of the response received is the comment from one commander who wrote, "PG education has proved to be very useful in all billets since graduation, including that of commanding officer of a submarine." An aviator lieutenant commander wrote that his PG education "has given me a progressive outlook, and has given me a better grasp of technical problems." A line lieutenant commander replied that "PG education was the most valuable experience of my career. Learning theory rather than just 'hardware' has given me a better approach to many problems."

* * *

The Superintendent of the Postgraduate School is Rear Adm. Robert W. McNitt, who is himself a graduate of the school in ordnance engineering. He also holds the degree of Master of Science from MIT. His extensive service at sea has included command of Cruiser-Destroyer Flotilla Four, which he left to become Superintendent here. During World War II he served aboard the submarine USS Barb, participating in five war patrols in the Pacific. For meritorious actions while on the Barb he was awarded the Silver Star Medal twice, and the Navy and Marine Corps Medal. He was graduated from the Naval Academy in 1938.

Staffing the school are 222 civilian faculty members, 84 naval officers, 178 enlisted men, and 476 civilian employees. The high proportion of seven out of ten of civilian faculty members hold doctoral degrees.

Leading the faculty of the School as Academic Dean is Dr. Robert F. Rinehart, a specialist in mathematics and operations research who served as professor of mathematics at the Case Institute of Technology in Cleveland before coming to the Naval Postgraduate School in 1965.

Among several distinctions including the Medal for Merit and the Medal of Freedom which Dr. Rinehart has received in the course of a distinguished career in the field of education and government service, he prizes the Asiatic-Pacific Campaign Medal. It was awarded by special action of Fleet Admiral Chester W. Nimitz during World War II after Dr. Rinehart, a civilian member of the Navy Operations Research Group, made a war patrol in the Pacific on the submarine USS Sea Owl.

After the war Dr. Rinehart served in several capacities in the Navy Department while on leave of absence from Case Institute. He is a fellow of the American Association for the Advancement of Science, and a member of several learned societies.

* * *

Part of the mission of the Naval Postgraduate School is "to foster and encourage a program of research in order to sustain academic excellence." In

carrying out this aspect of its mission, the PG School conducts research in a wide variety of scientific fields as a means both of offering students stimulating and motivating educational opportunities, and of attracting and retaining a strong faculty.

Among several historically significant scientific achievements accomplished by naval officers who received training in research techniques in the Navy's postgraduate education program was the first accurate measurement of the speed of light by Ensign A. A. Michelson in 1879 at Annapolis. Michelson in 1907 became the first American to receive the Nobel Prize for physics.

To further its present program of research, the Naval Postgraduate School has put into operation a 120-megavolt linear particle accelerator (sometimes called an "atom smasher," though seldom by scientists) as a tool for studies in nuclear physics.

A nuclear reactor is in operation on the PG School grounds, and research is being conducted in underwater acoustics and oceanography. An extensive system of astro-aeronautical propulsion laboratories provides the means for advanced research in this important area of Navy interest.

A computer facility valued at $3 million gives training in computer techniques, and offers the means for rapidly analyzing the raw data generated in the School's many research activities. A staff of ten at the computer facility provides assistance to students and faculty members, though the users themselves actually program the computers in most cases. Every PG School student pursuing an advanced

degree is trained in computer techniques, and a master's degree is offered in management data processing.

* * *

The years that the Postgraduate School has been situated in Monterey constitute only a portion of the School's history. A program of postgraduate education for U. S. naval officers has been in effect for all of this century and part of the last.

Naval officers first took postgraduate education in European technical colleges in the latter part of the last century as advancing naval technology made such education both desirable and necessary. The first two officers attended the Royal Naval College in London in 1879, studying marine engineering. Others subsequently attended leading technical colleges in Paris, Berlin, and Glasgow. In 1901 the Navy first sent officers to the Massachusetts Institute of Technology and, for education in certain fields, it continues to do so today.

In 1904 a course of instruction in Marine Engineering was instituted in what was at that time the Bureau of Engineering, and in 1909 a School of Marine Engineering was established at the Naval Academy in Annapolis. The Postgraduate School dates its existence from that year.

With a brief suspension during World War I, the Postgraduate School has continued to function, growing with the years. By the end of World War II the School had outgrown its facilities at Annapolis, and in 1951 it was relocated in

the buildings and grounds of what formerly had been the Del Monte Hotel in Monterey, which the Navy had taken over in 1942 and used during the war as a specialized-training center.

"The selection of the Del Monte Hotel site for the Postgraduate School was a most fortunate one in several ways," says Adm. McNitt. "The pleasant, quiet grounds create an excellent atmosphere for academic work, and there is room enough for necessary expansion over the years."

* * *

The Del Monte Hotel had been one of the foremost luxury hotels of the West Coast. Established in 1880 on a beautiful 133-acre tract with its own stretch of sandy beach on Monterey Bay, the hotel -- built at the then-appalling cost of a quarter of a million dollars -- quickly attracted the rich and prominent of the West Coast and the world.

At midnight on April Fool's Day, 1887, an "incendiary" set fire to the hotel building and in an hour it was totally destroyed. A year later the hotel was rebuilt, bigger and more costly than ever. The new hotel building withstood the earthquake of 1906 which caused the disastrous fire that swept San Francisco 125 miles to the north, but in a bizarre and tragic accident the chimney of the hotel was toppled by the tremor. Plunging through the building's roof into a bedroom, it killed a honeymoon couple.

Diversions such as riding, tennis, croquet, swings, lawn tennis, a swan-dotted lake, the "largest and most lavish ladies billiard parlor in the United States," a barroom, and a bowling alley were offered to the Del Monte's guests. The dining room could seat and serve 750 people at a time. The first racetrack, the first polo field, and the first golf course in California were built at Del Monte. Eighteen miles by horse-drawn coach from the hotel were 12,000 acres of Del Monte land on which guests could shoot deer, quail, fox or mountain lion.

The hotel burned a second time in 1924. Rebuilt at a cost of $2 million, it was reopened in 1926, and it was the 1926 building that the Navy took over in 1942. Renamed Herrmann Hall, it exists today as the School's main administration building.

After World War II the Navy bought the hotel and its 133-acre tract for less than three million dollars. Today, with the addition of buildings, and equipment, and with the increase in land value, the worth of the School complex is estimated at $55 million to $60 million dollars. The beachfront property alone is valued at about $10 million.

Visitors are welcome on the School grounds from 10 a.m. to 6 p.m. daily.

* * *

From World War II to November 1967 a total of 6,772 degrees were awarded by the Naval Postgraduate School. Twenty-two of these were doctorates

of philosophy in various scientific and technical fields. Eighteen were the highly prestigious degree of aeronautical engineer. Some 2, 422 were master's degrees, and 4, 310 were bachelor's degrees.

Degrees have been awarded by the PG School in aeronautical engineering, chemistry, communications engineering, electrical engineering, engineering electronics, environmental science, and management. Also, aeroelectronics, management data processiong, materials science, mechanical engineering, meteorology, operations research, physics, and mathematics.

All of the degrees awarded by the Naval Postgraduate School are fully accredited and recognized by collegiate accrediting organizations.

The Superintendent of the Naval Postgraduate School also administers the Navy's postgraduate education program which sends officers to civilian institutions for studies not offered at the Postgraduate School itself.

In 1966, for example, 365 officers pursued degrees in fields ranging from nuclear engineering to religion at such schools as Harvard, Princeton, Stanford, the California Institute of Technology and 33 other prominent educational institutions in every part of the country.

In common with many engineering institutions, the Naval Postgraduate School sends some of its students to MIT for a third year of engineering studies in certain fields. MIT conducted a study of the success of its third-year students as a whole and found that those from the Naval Postgraduate School had established

the best scholastic record of any in the third-year program, indicating that both the naval-officer students and the preparation they had received in their two years at Monterey were of top quality.

* * *

Just as the Postgraduate School has grown from its ten-member student body in 1909 to its present enrollment, continued expansion is seen in prospect for the years ahead as the degree of technical and scientific expertise required of naval officers continues to increase.

To provide for expansion of the School and a forecasted student body of more than 2,000 officers in the 1970's a long-range development plan has been devised to ensure the best possible utilization of the School grounds.

Included in the plan is a new academic building now under construction which will incorporate laboratories, classrooms, office space, a new computer complex, and a closed-circuit television network. It will be named Ingersoll Hall for Adm. Royal E. Ingersoll, Commander in Chief of the U. S. Atlantic Fleet during much of World War II.

A modern technical library is planned, as is a gymnasium with physical-fitness facilities "adequate to meet the needs of active officers who need systematic exercise to offset hours spent in the classroom and at the study desk," says the PG School's public works officer, Comdr. D. W. Urish.

The School's oceanographic plant is to be greatly expanded, and a 600-seat chapel is planned for the Navy housing area. Plans for a combined dispensary and dental support building on the grounds of the School have been laid.

Speaking about the future of postgraduate education in the Navy at commencement exercises at the PG School in May, 1966, Secretary of the Navy Paul H. Nitze said, "We foresee that the future men at the top of this highly competive profession will come, almost inevitably, from among those who have pursued higher education."

-USN-